

Claims 1 - 4. (Previously Cancelled)

5. (Cancelled)

6. (Previously Amended) A thermoforming apparatus as claimed in claim 43, wherein said template conveyor extends through at least one work and/or treatment station and moves stepwise at the opening-closure rate of the dies for receiving thermoformed articles from an extraction plate associated with said extraction pick-up means, said extraction plate withdrawing one or more thermoformed articles from the female die and transferring the one or more thermoformed articles to at least one receiving conveying template of said one or more receiving conveying templates, said template conveyor conveying the thermoformed articles in sequence to said at least one work and/or treatment station along the template conveyor.

7. (Cancelled)

8. (Previously Amended) A thermoforming apparatus as claimed in claim 6, wherein said template conveyor is a chain conveyor which comprises a pair of chain wheels around which a respective chain is wound, the one or more receiving conveying templates being carried at a predetermined distance spaced from each other on said chain conveyor.

9. (Cancelled)

10. (Previously Amended) A thermoforming apparatus as claimed in claim 43, wherein said annular collar comprises a truncated conical collar.

11. (Cancelled)

12. (Cancelled)

13. (Previously Amended) A thermoforming apparatus as claimed in claim 10, wherein said collar comprises suction orifices which exert on a thermoformed article a suction to hold the thermoformed article in proper orientation.

14. (Previously Amended) A thermoforming apparatus as claimed in claim 10, wherein the thermoformed articles have rims and wherein at least one receiving conveying template has a peripheral recess formed on the exterior surface of the template about at least one receiving hole for engaging the rim of a thermoformed article received in the at least one receiving hole.

15. (Cancelled)

16. (Previously Amended) A thermoforming apparatus as claimed in claim 6, wherein the thermoformed articles have rims and wherein said receiving holes have a slightly smaller internal dimension than the external dimension of the thermoformed articles adjacent their rims to be received, so that the thermoformed article is resiliently constrained and properly oriented in the respective receiving hole.

17. (Cancelled)

18. (Cancelled)

19. (Previously Amended) A thermoforming apparatus as claimed in claim 6, further including air jets for sinking each of the articles into the receiving holes.

20. (Previously Amended) A thermoforming apparatus as claimed in claim 6, further including a cup-shaped receiving component for a thermoformed article, the cup shaped component being disposed adjacent at least one of said receiving holes and having at least one orifice in a bottom of the cup-shaped component.

21. (Cancelled)

22. (Previously Cancelled)

23. (Cancelled)

24. (Previously Cancelled)

25. (Previously Amended) A thermoforming apparatus comprising at least one female die and counter-die reciprocally approachable and moveable for the operations of closing, thermoforming and opening, a feeder apparatus adapted for feeding thermoforming material between each female die and counter-die, and an extraction pick-up apparatus adapted to withdraw at least one thermoformed article from the female die and to transfer said at least one thermoformed article to a receiving conveying template, the receiving template including retention surfaces adapted to engage each thermoformed article, at least one retention surface of said retention surfaces being defined by at least a portion of a wall of a cavity in an element associated with the receiving conveying template, the cavity communicating with at least one exterior surface of the element and having an interior dimension which is smallest in a region remote from said exterior surface to define a shoulder thereat for resiliently holding a thermoformed article disposed in the cavity.

26. (Previously Amended) The thermoforming apparatus of claim 25 wherein the element is a plate and has two exterior surfaces disposed essentially parallel to each other, the cavity communicating with both exterior surfaces.

27. (Original) The thermoforming apparatus of claim 25 wherein the wall of the cavity is defined by two annular inclined surfaces which intersect each other at said shoulder.

28. (Previously Amended) The thermoforming apparatus of claim 27 wherein the two annular surfaces intersect each other at a plane which is disposed perpendicular to an axis of the cavity.

29. (Original) The thermoforming apparatus of claim 28 wherein the thermoformed article has a rim and wherein the shoulder is defined where the two annular surfaces intersect each other, the shoulder having a slightly undercut, internal angle of incidence, in order to allow insertion by the thrust of a rimmed thermoformed article and to enable the rimmed thermoformed article to be resiliently constrained and held firmly in position at its rim.

30. (Original) The thermoforming apparatus of claim 25 wherein the thermoformed article has a rim and wherein the shoulder has a slightly undercut, internal angle of incidence, in order to allow insertion by the thrust of a rimmed thermoformed article and to enable the rimmed thermoformed article to be resiliently constrained and held firmly in position at its rim.

Claims 31 - 42. (Previously Cancelled)

43. (Currently Amended) A thermoforming apparatus comprising:
a thermoforming machine fitted with at least one female die; and
extraction pick-up means adapted to withdraw a plurality of thermoformed articles from the female die, said extraction pick-up means including a receiving seat for each thermoformed article to be extracted,

wherein the thermoforming machine is fitted with at least one counter-die, the at least one female die and counter-die being reciprocally approachable and removable for the operations of closing, thermoforming and opening,

the apparatus further comprising a feeder for feeding thermoforming material between each female die and counter-die, and

at least one receiving station adapted to receive one or more thermoformed articles, wherein said receiving station comprises one or more receiving conveying templates in a template conveyor, each receiving conveying template having an exterior surface and one or more receiving holes disposed within said template and communicating with said exterior surface, each receiving hole having an annular collar to define a retention means for holding a thermoformed article disposed in the hole, said annular collar having an interior dimension being smallest in a region furthest

from said exterior surface, wherein said template conveyor comprises a carousel conveyor having at least three arms angularly spaced apart each supporting a respective receiving conveying template.

44. (Previously Cancelled)

45. (Cancelled)

46. (New) A conveyor for transporting thermoformed articles comprising:
a central axis;
at least three arms radiating from said central axis and angularly spaced apart,
said arms movable around said central axis, and each arm supporting a
receiving template, each receiving template comprising:
a plate having a plurality of spaced apart receiving holes, said plate
having an upper side and a lower side, said receiving holes
projecting through said plate from said upper side to the lower
side, and
a plurality of tapered collars attached at the lower side of the flat plate,
each tapered collar of said plurality of tapered collars positioned
around a corresponding receiving hole of said plurality of receiving
holes,
wherein each tapered collar and corresponding receiving hole have a shape and
taper adapted to receive a complementarily shaped thermoformed article.

47. (New) The conveyor according to Claim 46, wherein at least one receiving hole
further comprises an annular recess disposed around the at least one receiving
hole on the upper side of the plate.

48. (New) The conveyer according to Claim 46 wherein at least one tapered collar
further comprises suction orifices which exert on the thermoformed article a
suction to hold the thermoformed article in proper orientation.

49. (New) The conveyor according to Claim 46 further including air jets for sinking thermoformed articles into the receiving holes.
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